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ABSTRACT

The report identifies and organizes criteria for evaluating and determining the effectiveness of graduate programs in adult education. The first phase of the study, a review of the appropriate literature, contributed to the formulation of 22 criterion statements relevant to the development of graduate study in adult education. The study's second phase involved: defining the field of adult education; developing a behavioral classification scheme for the educational objectives of graduate programs in adult education; identifying existing statements of education objectives, professional competencies, and specific on-the-job behaviors of adult educators; classifying, refining, and formulating these statements into behavioral descriptions of these objectives; and refining those behavioral descriptions into a series of 23 statements for evaluating graduate study in adult education. Phase three involved surveying the opinions of adult education graduate students and doctorates regarding the importance of graduate study in developing professional competencies in the 23 behaviors. The phase three findings indicate that all 23 behaviors are important in the practice of adult education and that nearly all adult educators have a need for increasing their competence in these behaviors. Suggestions for improving graduate programs in adult education conclude the study, with an 11-page bibliography following. (JR)

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CRITERIA FOR EVALUATING GRADUATE STUDY IN ADULT EDUCATION

Findings of a Study Conducted for
The Commission of Professors of Adult Education

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BACKGROUND AND PURPOSE OF THE STUDY

Introduction:

Our citizenry, our government, and political, cultural, social, and religious leaders throughout the world are voicing the opinion that one of the greatest needs of our time is that of providing educational opportunities for adults to participate in continuous and life long learning. Continuing education is necessary if adults are to understand the changing world in which they live and if they are to effectively exercise control over the factors and forces which provide the structure and meaning for their lives.

The increasing interrelatedness and inter-dependency of political, social and economic affairs, the increasing degree of specialization in all fields of endeavor, the accelerating tempo of scientific investigation and application of technology, the decreasing ability of the individual to select and control the forces which govern his life, changing patterns of living resulting from automation and advances in transportation, the influence of mass media on opinions and attitudes, the increasing number of older adults in society, higher education levels, and the increasing capacity for self destruction are examples of some of the factors that have wide implications for adult education in today's society.

The literature reveals that nearly all of our major educational agencies and institutions have recognized or assumed some responsibility for adult education. Recent statistics show that more than three times as many dollars are currently being invested in adult education in the United States as are being devoted to all levels of pre-school through higher education. (105)

The educational programs of the Cooperative Extension Service, a joint undertaking between the federal government, land grant colleges and local governments, extend into every county of the nation. University extension divisions, evening

colleges, and public school adult programs are rapidly expanding in enrollment and services offered. Libraries, public health agencies, labor unions, industrial organizations, church groups, foundations, and community councils are more clearly defining their role and responsibility for the education of adults. (34:98-292)

The nature and scope of adult education is as wide and varied as the needs and interests of the people it serves. It may range from the application of agricultural science to the understanding of international affairs, from vocational training to community development, from discussions of the great books to labor-management relations. Whatever the interest or need, adults are looking more and more to continuing education as the means of solving their problems and building their future.

Out of this expanding matrix of educational activity has arisen the need for professionally trained adult educators who have the competencies needed to give sound guidance and leadership to adult education.

Need for the Study:

In 1957 Knowles (133) estimated that there were nearly fifty thousand full-time positions for adult educators in the areas of University Extension, Evening Colleges, Agricultural Extension, Public School Adult Education, Library Adult Education, Educational Broadcasting, and National Health and Welfare Agencies. Six years of phenomenal expansion in these areas have gone by since Knowles provided evidence of this data. Furthermore, these areas represent only a portion of the total field which provides positions for full-time careerists in adult education. A more accurate projection for today might indicate something like 100,000 full-time positions for adult educators. When we look at the actual and potential demand for practicing adult educators at the higher administrative

levels, we find that there are literally thousands of positions for full-time careerists compared to a few hundred persons who hold the doctorate in adult education. There is a definite trend among several of our major educational agencies to fill vacant positions formerly occupied by non-careerists and persons with professional commitments peripheral to adult education with professional adult educators who have acquired advanced degrees in adult education.

An increasing number of universities who offer the doctorate in adult education are providing internship opportunities so that younger men and women can plan a full-time career in adult education and circumvent the here-to-fore pattern of five, ten, or fifteen or more years of job experience before embarking upon a professional training program. The very fact that there were more than 1300 students enrolled in graduate courses in adult education during 1961-62 and that slightly more than 300 of these students were full-time degree students in adult education suggests that the future careerist in adult education will have a thorough background of graduate study and professional training relating specifically to his responsibilities as a professional adult educator. (83)

The discipline of adult education is now being defined and acquiring structure in the graduate schools. The present pattern of professional preparation for the practice of adult education is clearly one of graduate study. At the present time 35 universities and colleges are providing graduate programs in adult education, and 17 have established programs leading to the Master's and Doctor's degree in this area. (99)

An increasing amount of study and research is adding to the knowledge of the sociological and psychological foundations of adult learning. (4) From this research is evolving a body of knowledge that is providing the nucleus and framework for the developing curricula in adult education.

The Commission of Professors of Adult Education (93) has recognized a need for planned, systematic evaluation of the increasing and expanding graduate programs in adult education in order to provide the necessary information for guidance, direction, and program improvement. Clarification of definitions, identification of training needs, and selection of learning experiences designed to develop professional competencies are recognized as high priority tasks by the Professors of Adult Education. Criteria need to be identified and organized in order to determine if and when the objectives of graduate study in adult education are achieved. It is this aspect of evaluation that is of major concern in this study.

The primary purpose of the study was to identify and organize criteria that would be useful in evaluating and determining the effectiveness of graduate programs in adult education. The following factors contributed to the justification of such a study:

1. An expressed need by The Commission of Professors of Adult Education to identify criteria that could be used in evaluating the rapidly expanding graduate programs in adult education.
2. The evident lack of a methodology for identifying evaluative criteria for graduate programs in adult education as well as in other professions.
3. The need to crystallize definitions and more clearly specify the educational objectives of graduate programs in adult education.
4. The lack of knowledge as to the opinions of graduate students and doctorates in adult education in respect to the role of graduate programs in developing essential professional competencies.

The two major questions that served to focus the direction of this study were:

1. What are the criteria that would be most useful for evaluating graduate programs in adult education?
2. How can these criteria be identified?

Significance of the Study:

There are several dimensions to the practical significance of the study. If reliable and valid criteria for evaluating graduate programs in adult education can be identified they should prove useful in:

1. Determining the relative value of courses (content) and methods in adult education, the social sciences, and the humanities for the practicing adult educator.

2. Measuring student progress toward educational objectives and in determining if and when an acceptable level of competence is reached by students.

3. Providing a basis for comparing the merits of experimental teaching methods or programs of study with established methods.

4. Determining important but overlooked educational objectives and identifying desirable learning experiences designed to achieve these objectives.

Design and Procedure:

Since this investigation was exploratory in nature and represented an initial attempt to identify criteria for evaluating graduate programs in adult education, the specific design and procedures followed were developed as the study progressed.

Basically, the original design called for a comprehensive review of the literature of the various professions to ascertain the current status of evaluation methodology in determining the effectiveness of professional preparation programs.

It was believed that time devoted to this phase of the study would be well invested as it might uncover some valuable clues for formulating a rationale and methodology for identifying criteria that would be useful in evaluating graduate programs in adult education. It was decided that if an appropriate methodology for identifying such criteria could be developed, the criteria which appeared to hold promise for evaluating graduate programs in adult education would be submitted to the professors of adult education to ascertain their opinions as to the

adequacy of the criteria. The value of such criteria would, to a large extent, depend upon their applicability to the graduate programs in adult education and their adequacy as measures of the achievement of the objectives of these programs.

The following summary illustrates the design that was developed through the course of the study. As previously mentioned, the first phase of the study involved a comprehensive review of evaluation methodology that has been developing among the various professions in order to devise a methodology and rationale for identifying criteria that would be useful in the evaluation of graduate programs in adult education. This led to the second phase of the study which entailed a search of the literature of adult education to identify the overall educational objectives of graduate programs and to obtain descriptions of specific behaviors of adult educators that could serve as measures of the achievement of the educational objectives. This phase of the study, was designed to determine the opinions of and the extent of agreement among the Professors of Adult Education as to the adequacy of these criteria in evaluating their respective graduate programs.

The third phase of the study was designed to ascertain the opinions of graduate students and doctorates in adult education as to the usefulness of the evaluative criteria and to identify any differences in opinions which have implications for the overall evaluation of graduate study in adult education.

Mail-questionnaires and survey instruments were used in both the second and third phases of the study in order to obtain the opinions of the professors, doctorates, and graduate students in adult education.

PHASE I

REVIEW OF LITERATURE RELEVANT TO THE EVALUATION OF EDUCATIONAL PROGRAMS

The preliminary phase of the study involved a comprehensive review of the literature to identify evaluative criteria and to identify methods and techniques that have been developed among the professions for evaluating professional preparation programs. Areas of investigation that were reviewed included:

1. Studies related to determining and measuring the achievement of objectives.
2. Studies related to evaluating the overall effectiveness of educational programs, and studies designed to determine the adequacy of the means employed to achieve the ends of these programs.
3. Studies designed to identify factors related to academic, vocational, and professional success.
4. Studies concerned with the measurement and determination of teacher effectiveness.
5. Studies conducted to identify training needs of professional workers.
6. Studies conducted to identify and analyze professional roles.
7. Implications of personality and behavior theory for the evaluation of educational programs.

"An effective program of professional education requires systematic, valid, and continuous evaluation." (30) The determining of measurable objectives is one of the keystones upon which evaluation is based. The literature reveals that many educational agencies and institutions have been concerned with the problems of determining educational objectives. A forerunner to determining objectives is the identification of the field in which the objectives are to operate.

The literature contains the reports of many evaluation studies that range in scope from evaluations of the over-all educational programs of universities to evaluations of the effectiveness of certain procedures and methods employed to achieve the objectives of specific courses of instruction.

One area of study that provides information about the kind of training needed by the members of a profession is that which is related to identifying factors that are associated with professional success. Studies designed to determine factors that are predictive of job proficiency and academic success have implications for evaluation in that they illustrate procedures that have been useful in determining whether or not the acquisition of certain competencies, traits, or abilities are likely to lead to professional success.

A large number of investigations have been concerned with measuring teacher effectiveness and many of these studies have been directed toward evaluating the outcomes of teacher training institutions.

Role studies illustrate certain procedures for determining professional roles and functions and aid in determining educational objectives and training needs.

An examination of personality and behavior theory provides insight into some of the basic problems and obstacles involved in identifying behavioral patterns that reflect the achievement of educational objectives.

An examination of studies reported in the literature provided the basis for the following 22 criterion statements which were considered to be relevant to the development of graduate study in adult education. It is believed that programs that meet these criteria will have an evaluation design inherent within their organizational structure.

1. Evaluation is conducted as a continuous process for program improvement.
2. The nature of the discipline is clearly defined and there is uniform agreement as to the meaning of basic concepts for efficient communication.
3. Objectives are clearly defined and stated in measurable terms.
4. Objectives concerned with increasing professional competence are related to the trends, needs and problems of the society that supports the profession.

5. Objectives of graduate programs are consistent with the basic concepts, purposes, and ideology of the profession as generally expressed in the literature of the profession.

6. Objectives are formulated so that their achievement will implement the over-all goals of graduate education.

7. Important objectives to be achieved are defined in terms of the behavior that would characterize them.

8. Observable changes in student behavior are compared with the changes that are specified in objectives as being the desirable ones.

9. Statements of competency are expressed so that it is possible to distinguish between those who perform in a professionally competent manner and those who do not.

10. Students and faculty alike are aware of the overall and specific objectives of the graduate program.

11. Students actively participate in establishing their own goals and consider their own progress in terms of behavior change toward the goals they have set themselves.

12. At some time during the latter phases of graduate study, students are provided opportunities to practice in the professional roles they plan to assume following graduation.

13. Achievement of educational objectives is determined in a variety of ways including observation reports, interest scales, rating scales, self-appraisals, achievement tests, student diaries, case studies, and situational behavior tests.

14. Students are appraised at the beginning of graduate study, during graduate study and at some period following graduate study to determine their knowledge of subject matter, understanding of and ability to apply facts and principles, and acquisition of skills and attitudes.

15. The effects of major changes in instructional methods, content, and curriculum are evaluated through use of experimental and control groups.

16. Individual differences in education, job experiences, personality factors, and abilities are considered in developing individual student programs.

17. Individual student programs are designed so that students will acquire the basic core of professional knowledge and at the same time make maximum use of special abilities and interests.

18. Learning experiences are arranged so that students can integrate theory and practice.

19. Learning experiences are organized so that learners can relate ideas from a variety of fields, and so that they can approach new concepts from several different points of view.

20. Faculty members have had prior experience in professional practice to assist them in relating theory to practical situations.

21. The subject matter of each course is appropriate to the objectives of the overall program.

22. The graduate faculty maintains constant communication with professional organizations, agencies, leading practitioners, and other groups in order to keep abreast of changing professional training needs.

An examination of the preceeding list of 22 criterion statements reveals an interdependency among them in that the ability to apply certain of these criteria to a graduate program depends upon first being able to apply others. In other words there appears to be a dependency order which must be considered in their application to graduate programs.

The following examples will illustrate this concept. Criteria numbers 5, 6, 7, 8, and 10 depend upon clearly defined objectives for graduate programs in adult education. This condition must first be satisfied by meeting criterion number 3 which relates to clearly defined objectives. This criterion, in turn, is dependent upon criterion number 2 which involves an accurate definition or description of the field or discipline upon which the graduate program is based.

Criterion number 8 states that, "observable changes in student behavior are compared with the changes that are specified in objectives as being the desirable ones." In order to apply this criterion, it is first necessary to satisfy criteria 3, 4, 5, 6, and 7 which relate to determining objectives so that they will adequately reflect desirable professional behaviors.

After reviewing the literature on evaluation among the various professions, educational agencies and institutions, it was concluded that an effective graduate

program in adult education could be defined in terms of one that satisfies the foregoing 22 criteria.

The question that now arises is, to what extent can these criteria be applied to existing graduate programs in adult education? To answer this question the 22 criterion statements were presented for discussion by faculty members and graduate students in adult education.

The results of this discussion indicate that at present there are adequate techniques and information available to apply criteria numbers 1, 12, 20, and 22, to graduate study in adult education. That is, it can be determined whether or not these programs are continuously undergoing evaluation; whether or not students are being afforded opportunities to practice in the professional roles they plan to assume; whether or not faculty members have had prior field experience in adult education; and whether or not the graduate faculty maintains communication with the profession to keep abreast of new developments.

There was also general agreement that the information needed to apply the remaining criteria to determine the adequacy and effectiveness of graduate programs in adult education is not available at the present time. It was decided that the greatest contribution that might be made through this study would be to obtain information that is necessary to apply the criteria that involve the formulation of educational objectives, selection of learning experiences designed to achieve these objectives, and identification of behaviors that would reflect the achievement of these objectives.

A meaningful and effective evaluation of graduate programs in adult education will be one that accurately determines the extent that professional competence is being acquired among the students enrolled in such programs.

On the surface it appears that it would be a relatively simple procedure to make an evaluation of this kind. However, an examination of evaluation studies and the current status of evaluation methodology reveals that this is not the case. Recent advances in the development of rating scales and observational devices, and in the area of testing and measurement have contributed to solving the problem of obtaining reliable measurements. A variety of techniques have been developed to determine the statistical significance in change or gain when dealing with quantitative measures.

The first step in an evaluation procedure and apparently the greatest obstacle to overcome is the accurate determination and specification of what is to be measured. This obstacle becomes more acute in evaluating the effects of educational programs where the object of measurement is some change in skill, knowledge, attitude, or appreciation. In the evaluation of professional education it is necessary not only to know the extent that students have acquired an understanding of concepts, principles, and theory; but it is also imperative to determine their ability or proficiency in applying such knowledge to professional practice.

Thus, it appears that the ultimate criteria for evaluating the effectiveness of graduate programs in adult education can be expressed in terms of the professional behaviors of the practitioners which in toto determine their professional competence. The crucial point here is that these behaviors must be capable of observation and measurement and represent valid measures of the achievement of the objectives of the graduate programs in adult education. The following phase of the study was directed toward the identification of such behaviors.

PHASE II

THE IDENTIFICATION AND BEHAVIORAL CLASSIFICATION OF THE OBJECTIVES OF GRADUATE STUDY IN ADULT EDUCATION

The following conclusions derived from the investigations reported in the literature were instrumental in structuring the second phase of this study which presents a scheme for identifying and classifying the behavioral descriptions of the objectives of graduate programs in adult education.

1. Essential to the evaluation of an educational program is the identification of the objectives to be achieved, and the definition of these objectives in terms of observable and measurable behaviors that characterize them.

2. Meaningful evaluation depends upon an agreement as to the objectives to be attained by those involved in the educational process.

3. An effectual evaluation of professional preparation programs will provide information for program improvement in respect to the development and acquisition of professional competencies.

These conclusions suggested that the most productive approach to use in identifying criteria for evaluating graduate study in adult education would be to determine important professional behavior where successful job performance depends upon the knowledge, skills, abilities, or attitudes which embody the educational objectives of the graduate programs. The following six criterion statements for determining the overall efficacy of graduate programs appeared to be especially relevant to this study. These criteria were used as a basis for screening the literature of adult education to identify the educational objectives of graduate study in this field and to obtain behavioral descriptions of these objectives.

1. The nature of the discipline is clearly defined and there is uniform agreement as to the meaning of basic concepts for efficient communication.

2. Objectives concerned with increasing professional competence are related to the trends, needs, and problems of the society that supports the profession.

3. Objectives of graduate programs are consistent with the basic concepts, purposes, and ideology of the profession as are generally expressed in the literature of the profession.

4. Objectives are formulated so that their achievement will implement the over-all goals of graduate education.

5. Important objectives to be achieved are defined in terms of the behavior that would characterize them.

6. Statements of competency are expressed so that it is possible to distinguish between those who perform in a professionally competent manner and those who do not.

A preliminary search of the literature of adult education revealed that most of the objectives of graduate programs in adult education have been stated in terms of the broad, overall goals or aims of graduate study or professional preparation and that in general, these statements of objectives are of little value in determining whether desirable changes in behavior are taking place or whether essential professional competencies are being acquired by students.

Based on this observation it was decided that the most significant contribution that could be made in the continuance of the study would be the specification of the objectives of graduate programs in adult education in behavioral terms so that they would be capable of both observation and measurement. It was believed that such behavioral descriptions of objectives would bring them from a level of highly abstract generalization to a level of concrete experience that would: (1) help spell out exactly what it is that graduate study in adult education should accomplish in terms of changes in knowledge, skills, and abilities, (2) indicate the kind and degree of professional competence that is essential for successful

job performance on the part of the adult educator, (3) illustrate and point out important subject matter and content areas, and (4) help identify weaknesses in existing graduate programs.

The following operational objectives were provided in order to obtain the data for this phase of the study:

1. Define the field of adult education and describe the professional role of the adult educator.
2. Develop a behavioral classification scheme for the educational objectives of graduate programs in adult education.
3. Identify existing statements of educational objectives, professional competencies, and specific on-the-job behaviors of adult educators.
4. Classify and redefine statements of educational objectives in behavioral terms.
5. Determine the adequacy of these behavioral descriptions as measures of the achievement of the contextual or overall objectives of graduate programs in adult education.

Defining the Field of Adult Education:

The literature of adult education was first reviewed to obtain operational definitions and to bring into sharper focus the nature of the discipline. An operational definition of the field should make it possible to delimit the scope of the educational objectives by providing boundaries which indicate whether or not a proposed objective falls within the area of professional concern. Such a definition should also serve to facilitate a more uniform and systematic method of communication among the agencies of adult education, among adult educators, and within the institutions engaged in graduate training in adult education.

As a profession in its conceptual and formative phase, adult education has not yet reached the stage where there is consistency and unanimity of opinion among its members as to the exact nature and scope of the profession. A review of

the history and development of other professions leads to the expectation that as the profession of adult education matures its members will acquire a more uniform concept of the field and the educational philosophy upon which it is based.

An analysis of the following definitions of adult education provided a basis for determining an "operational definition" which may be useful in describing the field as a professional area and in providing a structure to serve as a framework for specifying the objectives of graduate study in adult education.

A definition offered by Essert (10) is that, "Adult education is an experience of maturing, voluntarily selected by people, whose major occupation is no longer that of going to school or college, in which these individuals or groups plan meaningful tasks and apply sustained inquiry to them.... The major portion of adult education in the nation is engaged in helping people meet their individual needs as they are interpreted by the individuals themselves."

Bryson (5) provides a definition broader in scope in that, "Adult education includes all the activities with an educational purpose that are carried on by the people in the ordinary business of life."

A more recent definition given by Stevenson (150) is that "Adult education consists of all purposeful planned activities for adults, formal or informal, of an educational nature which aids individuals as persons or as group members to increase vocational competence, to live more interesting and effective lives as persons, and to increase their capacity to understand social and political issues and participate intelligently in resolving them. This definition is intended to include remedial education, vocational education, and formal credit work except in those cases where the participant is devoting full time to such education."

Blakely (17:3-6) refers to adult education as a process of continuing education which, "becomes the growing and the harvest, for which formal schooling is

only the planting and the cultivation." He states that continuing education involves a purposeful and systematic use of educational opportunities to be a "free individual and a responsible citizen," it involves, "an ever-cyclical benefiting from the past, employment of the present, and preparation for the future," and it is, "the ideal of the educative society."

According to Bergevin (43), "Adult education in a democracy should point to broadening the horizons of its citizens in social, cultural, vocational, and physical areas in order to maintain and develop: (a) An intelligent electorate, (b) A health and happy citizenry, (c) Vocationally competent workers, (d) A broader cultural base for all and (e) An understanding of our rights and responsibilities and those of our fellow men."

Houle (82) defines adult education as, "The activity by which a mature person attempts to improve himself by adding to his skills or knowledge, developing his insights or his appreciation, or changing his attitudes; or the activity of individuals and agencies to change mature people in these ways." Most definitions of adult education include the concept of some increase or change in skills, knowledge, insight, and attitudes. After an extensive review of the literature, Chamberlain (73) concluded that adult education could be defined as, "An activity directed toward making persons more mature.... An effort which hopefully continues throughout life and is directed toward full realization of the self-potential." In the first case Houle defines adult education as an activity engaged in by mature persons whereas in the second definition Chamberlain defines adult education as an activity for acquiring maturity. Although these two definitions give a different emphasis to the word "maturity", the fundamental ideas expressed by both definitions are very similar. These different attempts to define adult education illustrate that the definitions are based on essentially the same or closely

related concepts and that the differences among them are mainly differences in terminology employed to express these concepts rather than differences in ideas concerning the nature of adult education.

In the foregoing definitions the following four concepts appear to be either explicitly expressed or implicitly implied and are relevant for an operational definition of the field:

1. Adult education is systematic in that it involves a series of planned, purposeful, educative experiences and does not relate to chance learning which may occur in various situations where learning is not a primary goal.

2. Adult education involves an active, planned, purposeful pursuit on the part of the learner which leads toward the achievement of identified goals or objectives.

3. Adult education excludes formal schooling when such study is central to the primary activity of the learner.

4. Adult education has an ethic which is based on the ideology and philosophical values of the society that supports it.

With these concepts in mind the role of the professional adult educator can be described in terms relating to the planning, guiding, and directing of adult education programs. Such activity may include performing in the roles of administrator, teacher, counselor, advisor, coordinator, etc.

In Chamberlain's study the professional adult educator is described as "An administrator who is responsible for the development and execution of programs. He may teach, he may act as a counselor, or consultant.... He is an organizer, standing as a middleman between the persons he seeks to serve and those he enlists to render the service...."

Similar ideas are expressed by Houle in his concept of a pyramid of leadership with a core of professionally trained adult educators at the higher levels who work with volunteer and lay leaders located at intermediate levels. The teaching and administrative staff of graduate programs in adult education might be represented by the apex or uppermost level of the pyramid.

The foregoing analysis of the definitions which have been offered to describe the field of adult education indicates a trend toward conformity in opinion among agencies and adult educators as to the nature and scope of the field. Certain basic concepts have been identified which are common to most definitions of adult education. In general, these concepts may be considered as representing the agreement among the profession as to what adult education is as far as such agreement is possible at the present time. It is suggested that these concepts be used as guide lines to serve as the basis for limiting the scope and determining the appropriateness of objectives for graduate study in the professional field of adult education.

Behavioral Classification Scheme for the Objectives of Graduate Programs in Adult Education:

The McGlothlin rationale for classifying the objectives of professional preparation programs was selected to provide the overall structure for classifying the objectives of graduate programs in adult education. (26:1-5)

According to McGlothlin, "professional education has grown up in response to demands of society for expert help in solving its problems, meeting its desires, and satisfying its needs.... Basically, professional education has two related aims: one, to supply enough professional people, and two, to assure society that they are competent to practice their professions."

In his comparative study of the nature and quality of training programs in ten different professions McGlothlin (26:6,7) identified the following five objectives which these programs held in common: The professional should have:

a. Competence to practice his profession with sufficient knowledge and skill to satisfy its requirements.

b. Social understanding with sufficient breadth to place his practice in the context of the society which supports it, and to develop capacity for leadership in public affairs.

c. Personality characteristics which make possible effective practice.

d. Zest for continued study which will steadily increase knowledge and skill needed by practice.

e. Competence in conducting or interpreting research so that he can add to human knowledge either through discovery or application of new truths.

It appears that there is general agreement among the various professions as to the overall objectives of professional education. However, McGlothlin (26) points out that such objectives have little significance without further definition. "Knowledge of what is needed? How much skill?....What should the school itself do? Answers to these questions are necessary to define the objective of competence to practice."

To arrive at a more concise and sharper definition of objectives, the behavioral classification scheme of Tschudin, Belcher, and Nedelsky was adapted for use in this study. (30:25)

According to these writers there are two aspects to educational objectives: one, the content or context in which behavior occurs, and two, the specific behavior itself.

The McGlothlin rationale suggests the following content areas for classifying the objectives of graduate programs in adult education.

1. The adult educator as a citizen and person.

2. The body of scientific and cultural knowledge which constitutes the discipline or field of study.

3. The agencies of adult education and the clientele that they serve.

4. The professional roles of adult educators and their relationship to clientele.

5. The adult educator's professional heritage and responsibility to society.

Using a modification of the behavioral categories suggested by Tschudin, et. al. (38:25), it is proposed that within each of the preceeding content areas the adult educator is expected to achieve some or all of the following behavioral objectives:

1. Critical thinking.
2. Understanding facts, concepts, and principles.
3. Communication skills.
4. Attitudes and beliefs.

Objectives stated in terms of these four behavioral categories become analytical, since desired behaviors can be analyzed in terms of knowledge and skills exhibited in these behaviors. The use of these terms offers a method of listing on a relatively few pages the behavior, content, and constituents that characterize or are present in the infinite variety of situations confronted by the adult educator in his day-to-day experiences.

An adaptation of both the McGlothlin and Tschudin classification systems for the categorization of objectives provided the following structural framework for classifying the educational objectives of graduate study in adult education.

1. Classify the educational or contextual objectives of graduate study under the behavioral areas of:
    a. Critical thinking.
    b. Understanding facts, concepts, and principles.
    c. Communication skills.
    d. Attitudes and beliefs.
2. Classify behavioral descriptions of objectives under the overall educational objectives of graduate study in adult education.

The following definitions were provided for the four preceeding behavioral categories:

A. CRITICAL THINKING is defined as the ability to (1) apply facts and principles through a process of deductive reasoning, (2) interpret data by means of inductive reasoning and (3) solve problems by means of the scientific approach which involves the use of both types of reasoning.

B. UNDERSTANDING FACTS, CONCEPTS AND PRINCIPLES refers specifically to understanding facts, concepts and principles derived from the various sciences and the humanities that are pertinent and relevant to adult education. It includes the behavior of: (1) recalling facts and principles when needed, (2) stating them in one's own words, (3) comparing, contrasting and perceiving relationships between facts and principles, and (4) translating from abstract concepts and principles to examples of concrete experience or specific situations.

C. COMMUNICATION SKILLS: Communication is defined as the process of receiving data or incoming stimuli by means of any one of the senses, the storage of such data, and the processes involved in organizing and sending data or information to another receiver. Efficient communication involves a proficiency in both the spoken and written word and a high competence in the use of various communication channels.

D. ATTITUDES AND BELIEFS: Attitudes are defined as predispositions for action or behavior in relation to certain classes of value objects and/or ideas. Attitudes toward things may be favorable or unfavorable, they may indicate a predisposition to accept or reject, the direction of behavior may be that of approach or avoidance, and the perceived valence of value objects and/or ideas may be positive or negative. Beliefs are similar to attitudes as determinants of behavior. They are usually more firmly imbedded, more resistant to change, and are held in relation to more specific objects, ideas, or goals.

Identification and Classification of Educational Objectives, Professional Competencies, and Specific On-The-Job Behaviors of Adult Educators:

The following sources were used in identifying the educational objectives, professional competencies, and specific on-the-job behaviors of adult educators:

1. Commonly used textbooks in adult education (34) (22) (17) (14) (23).
2. Professional journals (108) (109) (142) (110) (119).
3. Publications by adult education agencies (56) (61) (64) (57) (58) (46) (53) (45) (44) (60) (88) (85) (87) (106).
4. Specific studies relating to professional preparation programs in adult education (73) (68) (100) (71).
5. Materials published by institutions offering graduate study in adult education (80) (79) (55) (99).

A review of all available publications and documents yielded a list of 410 educational objectives, goals, professional competencies, and specific on-the-job behaviors of adult educators.

These statements of objectives, competencies, and behaviors were recorded on 3 x 5 cards to facilitate sorting and classification according to the scheme outlined in the preceeding section. Each statement was screened for agreement with both the contextural classification of McGlothlin (26) and the behavioral classification categories suggested by Tschudin (38). Items were also screened for compliance with the professional roles that might be performed by the adult educator. These screening procedures produced the following series of 18 broad objectives of graduate study in adult education and 223 behavioral descriptions of these objectives.

I. CRITICAL THINKING:

Educational Objective:

1. TO DEVELOP THE KNOWLEDGE, ABILITY, AND SKILLS NEEDED FOR CRITICAL THINKING SO THAT THE ADULT EDUCATOR CAN PERFORM AS A RESPONSIBLE CITIZEN AND FULFILL HIS PROFESSIONAL RESPONSIBILITIES TO SOCIETY.

Behavioral Descriptions: The Adult Educator:

a. Exercises leadership in civic and community affairs.

b. Conducts research in his own field.

c. Interprets research in his own and related fields.

d. Refrains from drawing hasty conclusions, yet is expedient in making needed decisions.

e. Knows his own limitations, strengths and weaknesses.

f. Follows a scientific approach in identifying problems and needs.

g. Exercises his right to vote on local, state and national issues.

h. Points out the limitations and applications of scientific principles that are relevant to adult education.

i. Considers alternative procedures when selecting teaching methods and techniques.

j. Formulates criteria for selecting lay leaders.

k. Identifies, critically evaluates, and discusses scholarly work by investigators in adult education and related fields.

l. Formulates reasonable generalizations and reaches logical conclusions when analyzing and interpreting data.

m. Judges the value of theory on the basis of how well it explains facts, how accurate it is in predicting new facts, and in its ability to generate new research and hypotheses for testing.

n. Has clearly identified his unique role as an adult educator and understands his responsibility in performing it.

o. Knows the strong and weak points of his program and what remedies of weaknesses are appropriate and practical.

p. Realizes that what is being said or done may not be a true expression of what is felt or believed.

q. Identifies areas of needed research and brings these to the attention of the profession and research personnel.

r. Identifies, organizes and effectively uses resource personnel.

2. TO DEVELOP THE COMPETENCY NEEDED TO ANALYZE ADULT EDUCATION PROBLEMS AND DETERMINE PRINCIPLES WHICH ARE PARTICULARLY HELPFUL IN DECIDING ON AN APPROPRIATE COURSE OF ACTION.

a. Determines the implications of issues, trends, decisions, public sentiment, and actions in community and public affairs at the local, state, national and international levels for adult education.

b. Studies and analyzes the social and economic trends and patterns within the community.

c. Identifies and interprets trends that have implications for adult education.

d. Distinguishes and helps others learn to distinguish between education and propaganda.

e. Helps people to develop the ability to resist the tendency toward mass-conformity.

f. Is aware of the forces and factors that give rise to technological, cultural, social and economic change, and uses this knowledge in identifying needs and determining goals and objectives.

g. Anticipates crises situations where change is most apt to occur.

h. Helps communities, groups and individuals to identify their educational needs.

i. Identifies interests, wants, and needs among his clientele.

j. Identifies needed social skills and plans for educational activities that will enable people to attain them.

3. TO ACQUIRE AN UNDERSTANDING AND WORKING KNOWLEDGE OF THE PROCEDURES AND PRINCIPLES OF EVALUATION

The Adult Educator:

a. Uses evaluation to help clarify and change objectives.

b. Abandons objectives that are shown to be unrealistic and unattainable with the available resources and facilities.

c. Helps learners to set their own goals which are realistic and capable of some degree of achievement.

d. Relates subject matter, learning experiences and observable behavior changes to the overall goals and specific objectives of the program.

e. Helps individuals and groups to formulate objectives that serve as an effective base for planning, conducting and evaluating their educational activities.

f. Evaluates progress in terms of attaining goals.

g. Sets objectives that are relevant to the needs and interests of those participating in his program.

h. Relates his program to the overall goals of continuing education.

i. Compares observed changes in behavior, skills, knowledge or attitudes among learners with the changes that were specified in the objectives as being the desirable ones.

j. Knows when a program or activity reaches the point of diminishing returns and takes positive action to redirect or end it.

k. Uses a variety of techniques and methods such as observation reports, interest scales, rating scales, self-appraisal and achievement tests, diaries, case studies and situational behavior tests in order to evaluate the achievement of educational objectives.

II. UNDERSTANDING FACTS, CONCEPTS, AND PRINCIPLES

1. TO ACQUIRE A KNOWLEDGE AND UNDERSTANDING OF THE HISTORY AND DEVELOPMENT OF ADULT EDUCATION AND AN UNDERSTANDING OF THE NATURE, SCOPE AND ACTIVITIES OF THE ORGANIZATIONS, INSTITUTIONS AND AGENCIES THAT ARE CONCERNED WITH ADULT EDUCATION.

The Adult Educator:

a. Understands the role of adult education in society and is aware of the factors and forces that give rise to and affect this function.

b. Works and cooperates with the various educational and related institutions in his community.

c. Recognizes his professional role as an adult educator.

d. Secures the services of agencies other than his own when they can more effectively provide resources and needed services.

e. Has a thorough knowledge of his community and its resources.

f. Uses subject matter, methods and techniques that are appropriate to adults.

g. Cooperates with other agencies in planning for educational programs.

2. TO DEVELOP AN UNDERSTANDING OF THE PRINCIPLES OF PROGRAM PLANNING AND DEMOCRATIC LEADERSHIP DEVELOPMENT

The Adult Educator:

a. Makes certain that all group members have the chance to participate in decisions on matters and issues that are important to them.

b. Helps people to develop competence in working together to solve the problems of group living.

c. Follows democratic principles as a guide in selecting methods to use in guiding action toward goals.

d. Is democratic in organizing and directing complex administrative activities.

e. Is effective in building a teaching team among lay leaders and group members.

f. Develops testing and measuring devices in order to determine behavior change.

g. Provides means and opportunities for intensive self-evaluation.

h. Involves those who will benefit from the educational activity in the program planning process.

i. Helps adults to formulate their own goals and objectives.

j. Is aware of the degree that objectives are achieved by the learners and makes this information available to them by involving them in the evaluation process.

k. Has a working knowledge of organization skills.

l. Helps learners to actively set their own goals and consider their own progress in terms of behavior change toward the goals they have set themselves.

3. TO DEVELOP AN UNDERSTANDING OF AND SKILL IN THE USE OF VARIOUS TEACHING METHODS, PROCEDURES AND TECHNIQUES

The Adult Educator:

a. Uses teaching methods that are appropriate in terms of materials, resources, subject matter, problems and goals of the individual learners.

b. Uses a wide range of educational approaches, methods and techniques.

c. Is skillful in guiding group discussion.

d. Uses visual aids effectively.

e. Uses teaching methods appropriate to the learners.

f. Has a working knowledge of group methods and techniques.

g. Gears his teaching to the educational and ability level of his learners.

h. Selects teaching methods on the basis of what is to be learned and the needs of the learners.

4. TO ACQUIRE AN UNDERSTANDING OF THE CONDITIONS UNDER WHICH ADULTS ARE MOST LIKELY TO LEARN AND TO DEVELOP THE ABILITY TO PROVIDE THE MOTIVATION, GUIDANCE, REWARD AND REINFORCEMENT NEEDED FOR EFFECTIVE LEARNING.

The Adult Educator:

a. Recognizes when learners are setting levels of aspiration that are unrealistically high or low and guides them toward more appropriate levels.

b. Provides or identifies needed resource material.

c. Provides his learners the opportunity for contemplation and reflection.

d. Provides challenge and challenging situations for effective motivation and action.

e. Helps his learners to overcome fear or threat of failure.

f. Provides for pleasant emotional experiences in the learning situation.

g. Effectively guides searching behavior in problem solving activities.

h. Plans, directs and guides educational activities in view of the developmental tasks and current problems confronting the learners.

i. Provides adequate reinforcement, recognition and reward.

j. Assists the learners in making an appraisal at the beginning of their educational programs, during the course of the program, and at the conclusion of the program or at some later date in order to provide feedback and knowledge of results, and to determine progress made toward achieving goals and objectives.

k. Develops confidence among the learners by starting with solvable problems.

l. Avoids creating conditions of severe conflict and frustration.

m. Provides opportunity for learners to practice newly acquired skills.

n. Provides opportunity for distributed and massed practice in psychomotor learning.

o. Considers the likes and dislikes of the learners in planning learning experiences.

p. Contributes to and stimulates in his learners the qualities of self-confidence and intellectual curiosity.

q. Has the ability to detect the stage of idea acceptnace that learners are in.

r. Makes use of existing values, beliefs, customs and attitudes as a starting point for educational activities.

5. TO ACQUIRE AN UNDERSTANDING OF INDIVIDUAL DIFFERENCES AMONG LEARNERS, THE IMPLICATIONS OF THESE DIFFERENCES FOR ADULT EDUCATION, THE ABILITY TO RECOGNIZE THESE DIFFERENCES, AND COMPETENCE IN PROVIDING FOR THEM IN THE LEARNING SITUATION.

The Adult Educator:

a. Recognizes and provides for individual differences in need for achievement, success and self-esteem.

b. Recognizes individual differences among his learners in: (a) social, cultural, and vocational experience, (b) educational level attained, and (c) motivational factors.

c. Recognizes the learning experience when it occurs.

d. Designs and plans learning experiences that are appropriate to the educational level, interests, needs, past experiences and abilities of the learners.

e. Recognizes individual talents and abilities and makes use of the contributions of all group members.

f. Recognizes the developmental tasks confronting adults in the various stages of their lives.

g. Recognizes the basic needs of his learners in their growth and developmental processes.

h. Recognizes limitations imposed on learning by heredity and environmental factors.

i. Provides opportunities for fulfilling individual needs for belongingness, participation, and status.

j. Provides for individual differences in rate of learning, motivation, interest, attitudes and special abilities.

k. Identifies and works with those who are apt to be the innovators and early adopters in order to secure the acceptance and adoption of new practices or methods.

l. Is aware of the deep emotional commitments held by his clientele pertaining to significant social issues, and plans for educational programs and learning experiences with these commitments in mind.

m. Gives special attention to persons who have personality traits which interfere with effective interaction in a group setting.

n. Provides opportunity for the fulfillment of needs identified by students.

o. Helps his learners set individual goals that are realistic and appropriate to them.

p. Knows the source and degree of the learner's preparation and the aptitudes and abilities that are prerequisite for a particular educational program.

6. TO ACQUIRE A KNOWLEDGE AND UNDERSTANDING OF THE DYNAMIC INTERACTIONS BETWEEN PAST EXPERIENCES, PRESENT ACTIVITIES, AND FUTURE ASPIRATIONS AND HOW THESE INTERACTIONS AFFECT ADULT LEARNING.

The Adult Educator:

a. Understands how the perception of time changes with age and how this affects motivation, attitudes, feelings, etc.

b. Is aware of the effects of past experience on perception, acquisition of judgmental categories, and formation of hypotheses among his learners.

c. Recognizes that there is an adult mind which is different from that of the child because of the greater number and variety of experiences and problems that the adult has encountered.

d. Seeks information as to the social, ethnic, educational, cultural, and economic differences among his learners.

e. Identifies the particular social and vocational roles of his learners.

f. Recognizes previously acquired mental sets, attitudes, and prejudices that may interfere with new learning or with the acquisition of new attitudes.

g. Provides an atmosphere where adults are free to search and fumble without fear of institutional or inter-personal threat.

h. Is attentive to and responds to facial expressions, tone of voice and body movements which may be a more reliable index of feelings and attitudes than words spoken.

i. Does not accept all behavior at face value or as being congruent with actual feelings, attitudes, or beliefs.

j. Makes effective use of known interests, wants, and needs to stimulate new interests.

k. Recognizes and has insight into the interrelationships and interaction among the various roles performed by his clientele, and understands how perception of these roles affects self-concept, goals, motivation, aspiration and behavior.

l. Recognizes, accepts, and overcomes poor performance that occurs under situations of stress or extreme emotional involvement.

m. Has a thorough knowledge of his community, including the numbers of people in different age and social groups that are facing different developmental tasks.

7. TO ACQUIRE A KNOWLEDGE AND UNDERSTANDING OF THE CONDITIONS THAT FACILITATE TRANSFER OF LEARNING AND TO DEVELOP THE ABILITY NEEDED TO MAKE LEARNING EXPERIENCES MEANINGFUL.

The Adult Educator:

a. Uses sound principles of learning as a guide in selecting teaching methods and techniques to plan for meaningful learning experiences.

b. Arranges learning experiences so that learners can integrate theory and practice.

c. Organizes learning experiences so that learners can approach new ideas and concepts from several different points of view.

d. Plans learning experiences for transfer so that things learned will have meaning and value.

e. Organizes materials into appropriate and meaningful learning units.

f. Provides adequate preparation for new learning experiences.

g. Provides opportunity for adults to develop and test their own hypotheses.

h. Knows the usefulness of what is learned for subsequent adult learning.

III. COMMUNICATION SKILLS:

1. TO DEVELOP SKILL AND ABILITY TO COMMUNICATE EFFECTIVELY IN THE SPOKEN AND WRITTEN WORD

The Adult Educator:

a. Uses judgment in what to say and how to say it.

b. Intelligently observes and listens to what is being said or done, and uses this information in guiding his response.

c. Listens and hears the other fellow out.

d. Endeavors to understand what is meant as well as what is said.

e. Anticipates the reactions of others to his own actions.

f. Reads and speaks a foreign language.

g. Prepares reports that are precise and accurate.

h. Skillfully and tactfully approaches and deals with controversial issues.

i. Makes known his own point of view and personal bias.

j. Objectively presents contrasting points of view.

2. TO ACQUIRE THE ABILITY TO EFFECTIVELY COMMUNICATE WITH THE VARIOUS AGENCIES CONCERNED WITH ADULT EDUCATION

The Adult Educator:

a. Assumes an active role in the exchange of information with other agencies and educators.

b. Systematically cultivates a group of coordinators in industry, business, and other community organizations, and agencies to identify interests, problems, wants, and need of adults.

c. Effectively stimulates other agencies to serve new needs as they become identified.

d. Cooperates in the program of other agencies.

e. Is proficient, competent, and timely in making his reports to his agency and the public.

f. Clearly and effectively communicates the results of his work to others.

g. Keeps up to date and well informed of the activities of other adult education agencies and organizations.

3. TO ACQUIRE SKILL AND COMPETENCE IN THE METHODS AND TECHNIQUES OF COMMUNICATION WITHIN THE GROUP SETTING

The Adult Educator:

a. Effectively organizes, guides, and/or leads group discussion, panels, forums, symposiums, etc.

b. Is competent in a variety of group techniques, such as role playing, buzz sessions, panels, etc.

c. Is skillful in developing a group feeling.

d. Skillfully keeps the group moving toward desired goals.

e. Understands and overcomes the psychological barriers to communication between individuals and groups.

f. Recognizes and overcomes inhibitions and blocks to communication among members of his group.

g. Recognizes when the communication process breaks down or when it is not adequately functioning.

h. Tactfully and effectively controls those who tend to dominate the group discussion and involves those who are not participating.

i. Is an effective group member as well as a leader.

j. Makes certain that learners are aware of goals and objectives to be achieved, and that they perceive these goals as being important to them.

k. Arranges for "feedback" to the learners for self-evaluation of progress toward goals.

l. Interprets and communicates to his learners the results of studies and activities that are relevant to their program or activity.

4. TO ACQUIRE SKILL AND COMPETENCE IN THE USE OF THE MASS-MEDIA

The Adult Educator:

a. Effectively uses the mass-media to secure public support for adult education programs.

b. Makes effective use of the mass-media for teaching purposes.

c. Publicizes the purposes, nature, and scope of adult education via the mass-media.

d. Has a personal and friendly acquaintance with local editors, newcasters, and repotters.

e. Makes use of a variety of publicity channels to encourage, promote, and stimulate adult education.

f. Is skillful in a variety of writing forms and techniques, such as newspaper columns, and announcements, radio and TV scripts and releases, public reports, professional journals, lay magazines, and research.

g. Effectively uses the mass-media to provide recognition for outstanding educational achievements among his clientele.

h. Makes use of the mass-media to announce educational activities and events, and to provide a follow-up on activities and accomplishments.

i. Knows the kind of information and stories that his editors want and makes sure that they receive it.

IV. ATTITUDES AND BELIEFS:

1. TO ACQUIRE A KNOWLEDGE OF AND COMMITMENT TO THE OVER-ALL AIMS OF ADULT EDUCATION AND TO RECOGNIZE THAT CONTINUING EDUCATION IS ESSENTIAL FOR AN ENLIGHTENED AND RESPONSIBLE CITIZENRY IN A DEMOCRATIC SOCIETY.

The Adult Educator:

a. Helps to provide for a smooth transition from formal schooling to adult education at the high school, junior college, and college level by providing young adults opportunities to enter into selected adult education programs.

b. Works with schools, teachers, parents, and pre-adults in order to assist them in developing the motivation, attitudes, understanding, and skills necessary for life-long learning.

c. Helps people think through, plan for, and satisfy their personal and developmental needs.

d. Helps people control and adjust to change rather than to maintain the status quo.

e. Provides educational assistance to help people move toward the goals of self-realization, improved human relationships, economic efficiency, and civic responsibility.

f. Contributes to an increase in reciprocal understanding and appreciation among people with different cultural and ethnic backgrounds.

g. Works for a synthesis of ideas among learners rather than mere compromise.

h. Understands the importance of self identity among the people and effectively helps them in their search for meaning and a sound social philosophy.

i. Helps to make social evolution a conscious process on the part of people.

j. Helps people to expand their communication skills.

k. Helps his clientele acquire the ability for critical thinking.

l. Is aware of the implications of national and international events which should be known by all adult citizens.

m. Stimulates concern for public issues and problems.

n. Constantly seeks to broaden his learners' horizons and base of understanding.

2. TO DEVELOP A PROFESSIONAL ATTITUDE, A KEEN-SENSE OF PROFESSIONAL ETHICS, AND A FIRM COMMITMENT TO ADULT EDUCATION

The Adult Educator:

a. Shows an active interest and enthusiasm toward adult education.

b. Has developed a personal philosophy or set of values concerning adult education.

c. Is confident in his own ability as an adult educator.

d. Shows objectivity in that he is fair, impartial, and relatively free from prejudices.

e. Avoids building programs so that he becomes a central and indispensable key figure.

f. Refrains from using his position or status to secure acceptance of his personal prejudices, attitudes, and beliefs.

g. Recognizes that educative methods and techniques are tools for teaching and belong to the learner as well as the teacher.

h. Believes that there is a potential for growth and development in most people.

i. Believes that innovation and experiment are necessary for the development and expansion of adult education.

j. Has a desire to be a responsible leader in his profession.

k. Keeps up-to-date in the general area of adult education and in his special field.

l. Is highly competent in a particular discipline or field of study.

m. Is actively involved in continuing study that will increase his professional competence.

n. Takes an active part in adult education at the level for which he has been trained.

o. Belongs to professional societies in adult education and related fields for which he is eligible.

p. Expresses optimism concerning the perfectability of human society.

q. Fills out and promptly returns questionnaires and provides information needed for studies and research in adult education.

3. TO DEVELOP A SINCERE RESPECT FOR AND BELIEF IN THE DIGNITY, VALUE, AND WORTH OF EVERY INDIVIDUAL

The Adult Educator:

a. Provides for individual growth within the group setting.

b. Willingly turns over leadership roles as people become qualified to fulfill them.

c. Shows no air of superiority among his learners or clientele.

d. Applies the principles of democratic group leadership.

e. Is considerate of and shows a concern for the feelings and well-being of others.

f. Considers the likes and dislikes of the learners when planning programs for them.

g. Respects and accepts his clientele as they are.

h. Tries to understand the other person's point of view.

i. Believes in the freedom of thought and expression.

j. Has a personal acquaintance with local leaders and those with whom they work.

k. Recognizes and is sensitive to emotional disturbances such as fear of failure, fear of not having the correct social values, feelings of inferiority, aggression, conflict, and withdrawal behavior.

l. Plans and directs his teaching and leadership on the basis of a thorough knowledge and understanding of the deep emotional commitments of adult learners.

m. Develops an interest in and acquaintance with those who are not involved in systematic, planned, purposeful, and continuing education.

n. Maintains an open mind and is willing to accept points of view other than his own.

o. Makes known his own biases when they begin to influence the opinions and learnings of others.

p. Actively shares, participates, and learns with the learners in the learning experiences.

q. Identifies potential leaders and helps them to develop their potentials and capacities.

r. Believes that all group members should participate in making program decisions.

4. TO DEVELOP AN ADULT EDUCATOR WHO IS A MATURE, ADJUSTING PERSON CAPABLE OF DIRECTING HIS OWN ACTIVITIES AND ASSUMING THE RESPONSIBILITY FOR HIS PROFESSIONAL ROLE

The Adult Educator:

a. Assumes authority that is delegated to him.

b. Assumes the initiative in developing a strong national perception of the importance and essentiality of continuing education.

c. Provides his learners with incentives, motivations, and foundations for learning and improvement.

d. Is flexible in that he readjusts his thinking to changing situations as groups move toward goals.

e. Establishes a position of leadership and confidence among those with whom he works.

f. Operates effectively and efficiently in a crash or emergency program.

g. Is emotionally stable and shows consistency, poise, and self-control when the going gets rough.

The Adequacy of Behavioral Descriptions in Measuring Achievement of Objectives:

The next phase of the study was an attempt to determine the extent of agreement among the Professors of Adult Education as to the adequacy of the foregoing 223 behavioral descriptions as criteria for determining the achievement of the 18 overall educational objectives of graduate study in adult education.

The data for this phase of the study were obtained through use of a mail questionnaire submitted to a jury of 16 professors of adult education. Table I shows the institutions represented by the jury. The jurors were asked to rate the degree of competence needed for successful job performance in each behavior, rank the behaviors as to their usefulness as measures of the educational objectives, and indicate whether or not the behaviors were observable and measurable.

As shown in Table II coefficients of concordance obtained for the rankings ranged from .11 to .40 indicating some but not a high level of agreement among the judges. Tests for significance of agreement among the jury showed significant agreement beyond the .05 level of confidence in 15 out of 18 sets of rankings. Since the agreement obtained was greater than would be expected by chance rankings, it was concluded that there was sufficient agreement among the professors to justify the use of their pooled ratings in determining the adequacy of the behavioral descriptions as measures of the educational objectives.

From a series of 223 behavioral descriptions of objectives the following 42 were judged as being observable, measurable, and useful as measures for evaluating the achievement of the overall objectives of graduate study in adult education. Item analysis revealed several clusters of similar behavior patterns among the 42 items. By combining similar items it was possible to reduce the 42 behavioral statements to the following series of 23 statements.

TABLE I

INSTITUTIONS AND NUMBER OF JUDGES RATING THE ADEQUACY OF BEHAVIORAL DESCRIPTIONS OF EDUCATIONAL OBJECTIVES

NAME OF INSTITUTION	Number of Judges
Boston University	1
Brigham Young University	1
University of British Columbia	1
University of California - Berkeley	1
University of California - Los Angeles	1
University of Chicago	1
Columbia University	1
Florida State University	1
Indiana University	3
Ohio State University	1
University of Michigan	1
New York University	1
University of Wisconsin	2
Total 13	Total 16

TABLE II

COEFFICIENTS OF CONCORDANCE AMONG RANKINGS OF THE USEFULNESS OF BEHAVIORAL DESCRIPTIONS FOR DETERMINING THE ACHIEVEMENT OF EDUCATIONAL OBJECTIVES

Objective Number	Behavioral Category	No. of Judges Ranking	No. of Items Ranked	Coefficient of Concordance "W"	Significance of "W"
	Critical Thinking				
1		15	18	.11	p .05
2		15	10	.30	p .001
3		15	11	.19	p .001
	Understanding Facts, Concepts and Principles				
4		13	7	.12	p .20
5		14	12	.20	p .01
6		12	18	.12	p .10
7		13	8	.40	p .001
8		13	16	.16	p .01
9		12	13	.28	p .001
10		11	8	.33	p .001
	Communication Skills				
11		12	10	.26	p .001
12		13	7	.19	p .05
13		13	12	.14	p .05
14		11	9	.17	p .05
	Attitudes and Beliefs				
15		12	14	.13	p .10
16		12	17	.22	p .001
17		12	18	.19	p .01
18		10	15	.37	p .001

Behavioral Descriptions of the Objectives of Graduate Study in Adult Education:

The Adult Educator:

1. Helps people control and adjust to change rather than to maintain the status-quo.

2. Intelligently observes and listens to what is being said or done and uses this information in guiding his response.

3. Selects and uses teaching methods, materials, and resources that are appropriate in terms of what is to be learned and in terms of the needs and abilities of the individual learners.

4. Helps his clientele acquire the ability for critical thinking.

5. Provides an atmosphere where adults are free to search, through trial-and-error, without fear of institutional or inter-personal threat.

6. Identifies potential leaders and helps them to develop their potentials and capacities.

7. Makes use of existing values, beliefs, customs, and attitudes as a starting point for educational activities.

8. Is actively involved in continuing study that will increase his professional competence.

9. Understands the role of adult education in society and is aware of the factors and forces that give rise to this function.

10. Actively shares, participates, and learns with the learners in the learning experiences.

11. Helps adults to actively set their own goals, and provides a variety of means and opportunities for intensive self-evaluation.

12. Identifies and interprets trends that have implications for adult education.

13. Has clearly defined his unique role as an adult educator and understands his responsibility in performing it.

14. Arranges learning experiences so that the learners can integrate theory and practice.

15. Is effective in building a teaching team among lay leaders and group members.

16. Uses the process of appraisal to evaluate programs and to help clarify and change objectives.

17. Is creative and imaginative in developing new programs, and believes that innovation and experiment are necessary for the expansion of adult education.

18. Makes use of the contributions of all group members through the utilization of individual talents and abilities.

19. Works with schools, teachers, parents, and pre-adults to assist them in developing the motivation, attitudes, understanding, and skills necessary for life-long learning.

20. Objectively presents contrasting points of view.

21. Assumes the initiative in developing a strong national perception of the importance and essentiality of continuing education.

22. Recognizes when the communication process is not functioning adequately or when it breaks down.

23. Identifies, critically evaluates, and discusses scholarly work by investigators in adult education and related fields.

These descriptions of the objectives for graduate study should prove useful in determining whether or not students are acquiring essential professional competencies, and they can provide a basis for determining the extent that specific graduate programs are designed to provide the knowledge, attitudes, and skills necessary for successful job performance in these behaviors.

PHASE III

THE OPINIONS OF GRADUATE STUDENTS AND DOCTORATES IN ADULT EDUCATION AS TO THE IMPORTANCE OF GRADUATE STUDY IN DEVELOPING PROFESSIONAL COMPETENCIES

This phase of the study was designed to determine the opinions of doctorates and graduate students in adult education as to the importance of graduate study in developing competence in certain behaviors and to identify factors associated with differences in the opinions among these two groups.

Opinions of the samples under study were obtained as to:

(1) The importance of graduate programs in adult education in developing the knowledge, skills, and abilities essential for competent professional performance in the 23 behaviors.

(2) The extent that competence in these behaviors should be acquired before entering a graduate program in adult education.

(3) The extent that the population perceived a need for increasing their professional competence in these behaviors.

It was also decided that it would be desirable to determine any differences among the samples as to their opinions concerning the acquisition of professional competence in these behaviors. It was believed that differences in opinion among the samples might be related to the following independent variables:

1. Professional status (Graduate student or Doctorate)
2. Sex
3. Age
4. Year in graduate school
5. Degree option (Ph.D. or Ed.D.)
6. Field-work or internship experience
7. Length of time in present position
8. Length of professional service

The population samples for this aspect of the study consisted of "professional adult educators" who had been awarded the doctorate in adult education

and persons who were currently enrolled as full-time graduate students in adult education. Selected and matched samples were obtained through information provided by Houle's concurrent study of the Doctorate In Adult Education. (126)

Opinions of the samples were ascertained by means of rating scales and yes-no response questions on a card-type mail questionnaire. Returns were obtained from 287 or 55 per cent of the 524 graduate students and doctorates included in the samples. Tests for homogeniety of variance and an examination of mean and median values for age, years of professional experience, and years in present position, indicated that representativeness had been achieved among the samples of doctorates that were matched on the basis of sex, institution attended, kind of degree awarded, and date degree was awarded.

Analysis of variance and the F test for significance were employed to determine any significant differences in ratings among the samples.

The .05 level of confidence was chosen as a basis for rejecting the null hypotheses of no differences in opinion among the samples classified by the previously described factors. When significant differences were found to exist between samples, confidence intervals were built to determine significant differences between individual pairs of means.

The Importance of Graduate Study in Developing Professional Competence:

The analysis of the data revealed that graduate study was considered to be extremely important by both graduate students and doctorates in adult education in developing competence for behaviors in which the adult educator:

(1) Uses the process of appraisal to evaluate programs and to help clarify and change objectives.

and (2) Identifies, critically evaluates, and discusses scholarly work by investigators in adult education and related fields.

The population samples also reported that graduate study was quite important in developing competence in behaviors in which the adult educator:

(1) Selects and uses teaching methods, materials, and resources that are appropriate in terms of what is to be learned and in terms of the needs and abilities of the individual learners.

(2) Is actively involved in continuing study that will increase his professional competence.

(3) Understands the role of adult education in society and is aware of the factors and forces that give rise to this function.

(4) Helps adults to actively set their own goals, and provides a variety of means and opportunities for intensive self-evaluation.

(5) Has clearly defined his unique role as an adult educator and understands his responsibility in performing it.

(6) Arranges learning experiences so that the learners can integrate theory and practice.

(7) Is creative and imaginative in developing new programs, and believes that innovation and experiment are necessary for the expansion of adult education.

Differences in opinions among the samples relating to the importance of graduate study in acquiring the knowledge, skills, and aptitudes necessary for competent professional behavior were found to be associated with: professional status, graduate student or doctorate; sex of graduate students; year in graduate school; years of professional experience of graduate students; age of doctorates; and tenure in present position of doctorates.

Differences in opinions as to the importance of graduate study were not found to be associated with: age of graduate students; degree option, Ph.D. or Ed.D.; field-work experience during graduate training; and years of professional

experience of doctorates.

In general the importance of graduate study was found to be rated higher by graduate students than by doctorates, higher by female than by male graduate students, higher by first-year students than by third-year students, higher by the older age group of doctorates than by younger doctorates, and higher by doctorates with least years in present position.

The Need to Acquire Certain Professional Competencies Prior to Graduate Study:

Neither graduate students nor doctorates expressed that a high degree of competence was needed in any of the 23 behaviors prior to graduate study. There was general agreement among the samples however that the entering student should have developed some competence in the areas of:

(1) Intelligently observing and listening to what is being said or done and using this information in guiding one's response.

(2) Recognizing when the communication process is not functioning adequately.

(3) Making use of existing values, beliefs, customs, and attitudes as a starting point for educational activities.

The opinions reported expressed the idea that these kinds of competencies should be acquired before a person reaches the graduate level, and that if they are not established by that time, that there is little or no chance of acquiring such competencies through formal graduate study.

Differences in opinions relating to the need for acquiring competence in certain behaviors prior to graduate study were found to be associated with: age

of graduate students and doctorates; field-work experience during graduate training for graduate students and doctorates; and years of professional experience in adult education.

Differences in opinions concerning the need for developing certain competencies before beginning graduate study in adult education were not found to be associated with: sex of graduate students; degree option, Ph.D. or Ed.D.; year in graduate school; years of professional experience for graduate students; and tenure in present position for doctorates.

The findings revealed that doctorates tend to rate higher than graduate students the need for developing certain competencies prior to graduate study. Older graduate students, 34 years of age and over, and those who had not participated in field-work programs as a part of their graduate training tended to rate higher than younger students and those who had field-work experience, the need for acquiring certain competencies before beginning graduate study in adult education. The older doctorates, and doctorates who had not participated in field-work during their graduate programs also tended to give higher ratings as to the need for acquiring competence prior to graduate study.

The Importance of Certain Behaviors in the Practice of Adult Education:

The behaviors that were considered to be most essential to the job of the adult educators by the highest percentage of the graduate students and doctorates were those in which the adult educator:

1. Recognizes when the communication process is not functioning adequately or breaks down.
2. Uses the process of appraisal to evaluate programs and to help clarify and change objectives.
3. Selects and uses teaching methods, materials and resources that are appropriate in terms of what is to be learned and in terms of the needs and abilities of individual learners.

4. Intelligently observes and listens to what is being said or done and uses this information in guiding his response.

It should be noted that graduate study was considered to be important for developing competence in behaviors two and three and of lesser importance for developing competence in behaviors one and four. On the other hand, both graduate students and doctorates felt that competence in behaviors one and four should be acquired before entering a graduate program in adult education. It appears that of the behaviors studied, the ones considered most essential to job performance by the samples represent certain behaviors that can best be acquired through graduate study and also examples of certain behaviors that can best be acquired by some other means prior to graduate study.

The Need For Increasing Professional Competence in Certain Behaviors:

A majority of the graduate students and doctorates expressed a need for increasing their competence in each of the 23 behaviors. The behaviors for which the highest percentage of both graduate students and doctorates expressed a need for more competence were those in which the adult educator:

(1) Identifies, critically evaluates, and discusses scholarly work by investigators in adult education and related fields.

and (2) Uses the process of appraisal to evaluate programs and to help clarify and change objectives.

Both of these behaviors were of the kind considered best acquired through graduate study. Since the respondents expressed the greatest need for increasing their competence in these behaviors, it was concluded that existing graduate programs in adult education were not placing adequate emphasis on developing the abilities needed by the practitioner to evaluate programs and to critically analyze research and theoretical writings. It is suggested, therefore, that the existing graduate programs be appraised to determine how they might more effectively provide for the acquisition of competence in these two areas.

Summary of Phase III:

This phase of the study made it possible to determine opinions held by graduate students and doctorates in adult education in respect to the importance of graduate study in developing competence in certain behaviors, the need for acquiring competence in these behaviors prior to graduate study, the essentiality of these behaviors to job performance, and the need for increasing competence in these behaviors. By comparing the importance of graduate study in developing professional behaviors with expressed need for increasing competence in these behaviors, it was possible to identify certain weaknesses in existing graduate programs.

Significant differences in opinions associated with certain characteristics of the samples were identified and have implications for appraising graduate programs in adult education.

It is suggested that the factors found to be associated with differences in opinions among the samples be taken into consideration if evaluations continue to be made on the basis of opinion surveys. Differences in opinions of graduate students that are associated with year in graduate school become crucial in longitudinal evaluations where opinions are obtained over a period of time. It should also be pointed out that the sex of graduate students as well as factors such as age and participation in field-work programs were found to be associated with opinion differences as to the importance of graduate study in developing professional competencies. It can be anticipated that graduate students will place greater value on the importance of graduate study in developing essential professional competencies than will the graduates of these programs.

The significant differences in opinions associated with certain character-

istics of students and graduates of adult education graduate programs provide the basis for concluding that more meaningful evaluations will result from the use of a behavioral approach based on observations or other measuring techniques such as situational tests, than can be obtained from ratings or opinion surveys of the recipients of graduate training.

On the basis of the findings of this study it is concluded (1) that each of the 23 behaviors studied represents an essential component in the over-all job performance of the professional adult educator, (2) that in general, adult educators have need for increasing their competence in these behaviors, (3) that more competence is required in some of these behaviors than in others prior to graduate study in adult education, and (4) that graduate study is effective in developing competence in certain of these behaviors, whereas competence in others can better be acquired by some means other than through graduate study in adult education.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The overall purpose of this study was to identify criteria that would be useful in evaluating graduate study in adult education. This goal led to three distinct although interrelated phases of investigation.

Phase I was devoted to the development of a rationale and methodology that was employed to identify the kind of measures that would be most useful for appraising and evaluating graduate study and professional preparation programs. This investigation yielded a series of 22 criterion measures which when applied would provide an objective basis for determining the adequacy and effectiveness of graduate study in adult education.

The adequacy of graduate study was viewed in terms of the extent that the goals and objectives of such study were congruent with:

1. The overall goals of graduate education.
2. The overall goals of professional preparation.
3. The individual needs and objectives held by students.
4. The content, body of knowledge, or discipline which structures adult education as a field of study.
5. The function, institutional forms of adult education, and the clientele which provide a field of professional practice.

The effectiveness of graduate study was viewed as a function of the achievement of the objectives of such study. This brought to focus the central problem of the study which is reported in Phase II; namely, the specification of the educational objectives of graduate study in adult education and the identification of valid criteria for determining the extent that these objectives are achieved.

In Phase II a methodology was developed to identify the overall objectives of graduate study in adult education. The application of this methodology yielded a series of 18 objectives which spell out what the graduate student should accomplish in terms of: (1) critical thinking or inductive and deductive reasoning, (2) understanding of certain concepts, facts, and principles, (3) communication skills, and (4) attitudes, values, and beliefs.

The ultimate criteria for determining the achievement of the 18 objectives of graduate study were defined in terms of specific behaviors or activities of the adult educator which reflect his professional competence. The literature of adult education yielded a list of more than 400 behavioral descriptions of professional practice of which 223 were found to be relevant to the objectives of graduate study in adult education. The 223 items were submitted to the professors of adult education to determine their validity and usefulness as criteria for determining the achievements of the objectives of graduate study. There was significant agreement among the professors as to the validity of 23 of the behavioral measures.

Phase III of the study was designed to determine the opinions of graduate students and persons holding the doctorate in adult education as to:

1. The importance of graduate study in developing competence in each of the 23 behaviors.
2. The importance of the 23 behaviors in the practice of adult education.
3. The need for increasing competence in these behaviors.

The findings of Phase III show that all 23 behaviors are very important in the practice of adult education and that nearly all adult educators have a need for increasing their competence in these behaviors.

The Role of Graduate Study in Adult Education In Developing Professional Competence:

The data obtained clearly indicate that the most important outcome of graduate study in adult education should be to produce students who demonstrate a high level of ability in:

(1) Understanding and applying principles and techniques of evaluation and appraisal.

(2) Identifying, discussing, and critically evaluating reported research and theoretical writings which are pertinent to the field of adult education.

(3) Selecting and using the most appropriate teaching methods, materials, and resources for a given situation.

(4) Continuing their own learning.

(5) Knowing and understanding the role of adult education in society and their own professional role as adult educators.

(6) Helping adults determine their own educational goals and evaluating progress toward achieving them.

(7) Arranging learning experiences to integrate theory and practice.

(8) Being creative and imaginative in developing new programs.

Weaknesses in Existing Graduate Programs in Adult Education:

Based on the findings of this study it can be concluded that existing graduate programs are not providing ample opportunity for the students to develop competence in:

(1) Using the process of appraisal to evaluate programs and to change and clarify program objectives.

(2) Identifying, discussing, and critically evaluating scholarly work by investigators in adult education and related fields.

On the other hand the findings suggest that in general too much emphasis is placed on "how-to-do-it" or methods type courses which are repetitious and of little or no value to the experienced adult educator and which are too far

removed from actual practice to benefit the student who lacks prior professional experience.

It is interesting to note that the graduate students and doctorates in adult education who did not have the advantage of an internship experience as a part of their graduate program reported that certain communication skills and certain professional attitudes should be acquired through job experience before one begins graduate study. This would seem to support the idea that experience in the field is a prerequisite to graduate study in adult education. The opposite point of view was expressed by those individuals who had the advantage of an internship experience in connection with their graduate study.

That is to say, the adult educator who lacks professional experience but who is afforded the opportunity to relate theory to practice through an internship or field-experience program reports that nearly all essential professional competencies can be acquired through a graduate program.

Suggestions for Improving Graduate Programs in Adult Education:

The following five recommendations are presented on the basis of the findings and conclusions of this study:

1. That greater emphasis be placed on developing professional competence in:
   a. Evaluation and appraisal.
   b. Understanding and interpreting the significance of reported research and scholarly writings.
2. That provisions be made or methods developed that will enable all students to more closely relate theory, concepts, and principles to professional practice.
3. That a supervised internship or field-work program be established for those students who have little or no prior experience in the field.

4. That the criteria identified in this study be used to:

   a. Appraise existing graduate programs in adult education in respect to the adequacy or inadequacy of course offerings, content, and learning experiences in developing essential professional competencies.

   b. Evaluate student progress, in terms of behavior change, toward the achievement of the educational objectives of graduate study in adult education.

5. That the overall project, of which this study was one part, to develop methods and techniques for evaluating professional preparation programs in adult education be continued along the following lines:

   a. That the role of graduate study in adult education be studied in relation to critical incidents in the job performance of adult educators where certain professional behaviors have been crucial in the success or failure of specific educational programs.

   b. That studies be undertaken to determine the relative efficacy of various kinds of learning experiences in the acquisition of knowledge, skills, and attitudes that are essential to professional competence.

   c. That role studies be conducted to identify the frequency of occurrence and relative importance of specific behaviors among adult educators who are performing in specialized roles such as teacher, supervisor, administrator, counselor, researcher, etc.

It is believed that investigation in these directions will provide information that is needed to structure graduate programs in adult education so that they will be more closely related to the needs of individual students in accordance with the nature of the professional roles these students plan to assume.

It is also suggested that these investigations be designed and conducted to allow for the identification of significant trends of changing patterns in professional roles and professional behavior among adult educators. The identification of such trends would materially assist those charged with formulating and administering professional preparation programs in anticipating changes or additions needed to serve the educational requirements of the profession.

BIBLIOGRAPHY

The following is a complete listing of the bibliographic materials used to develop the theoretical framework, rationale and methodology for the study. Also listed are references to the literature of adult education which provided the basis for identifying behavioral descriptions of the objectives of graduate study in adult education. Bibliographic citations in this report refer to selected references in the following bibliography.

Books

1. Barr, A. S., et. al. Supervision. Appleton-Century-Crofts, Inc. New York, N. Y., 1947, p. 381.

2. Brown, C. M., Evaluation and Investigation In Home Economics. F. S. Crofts & Co., New York, N. Y., 1941, p. 58.

3. Brownell, W. A., "Review of Forms CNT, ENT, and FNT." The Fifth Mental Measurements Yearbook. The Gryphon Press, Highland Park, N. J., 1959, p. 538.

4. Brunner, Edmund deS, et. al., An Overview of Adult Education Research. Adult Education Association of the U.S.A., Chicago, Ill., 1959, pp. 8-88.

5. Bryson, L., Adult Education. American Book Co., New York, N.Y., 1936, pp. 3-4.

6. Charters, W. W., and Whitley, I. B., Analysis of Secretarial Duties and Traits. William and Wilkins, 1924.

7. Diamond, S., Personality and Temperament. Harper and Bros., New York, N. Y., 1957, p. 463.

8. Dressel, P. L., "The Meaning and Significance of Integration," 57th Yearbook of the NSSE, University ofChicago Press, Chicago, Ill., 1958.

9. Essentials of a Good School of Nursing. National League of Nursing Education, New York, N. Y., 1942, p. 75.

10. Essert, P., Creative Leadership of Adult Education. Prentice Hall, Inc., New York, N.Y., 1951, pp. 5-8.

11. Ferguson, G. A., Statistical Analysis In Psychology and Education, McGraw-Hill, New York, N. Y., 1959.

57

12. Flanagan, J. C., "Critical Requirements: A New Approach to Employee Evaluation," Readings In Industrial and Business Psychology. Ed. H. W. Karn and B. H. Gilman, McGraw-Hill, New York, N. Y., 1952, p. 83.

13. Ghiselli, E. E., and Brown, C. W., Personnel and Industrial Psychology, McGraw-Hill, New York, N. Y., 1955.

14. Grattan, C. H., In Quest of Knowledge, Association Press, New York, N. Y., 1955.

15. Guiliford, J. P., Psychometric Methods. McGraw-Hill, New York, N. Y., 1954.

16. Hall, C. S., and Lindzey, G. , Theories of Personality. John Wiley and Sons, New York, N. Y., 1959, p. 572.

17. Handbook of Adult Education In The United States. Ed. by M. Knowles, A.E.A. of the U.S.A., Chicago, Ill., 1960, p. 624.

18. Hardin, E. O., et. al., Agricultural Adjustment Problems in A Growing Economy. The Iowa State College Press, Ames, Iowa, 1958, p. 234.

19. Harno, A. J., "The Education of a Lawyer Is a Life-time Undertaking." Legal Education In The United States. Bancroft Whitney Co., San Francisco, Cal., 1953, p. 169.

20. Herrick, V. E., "The Evaluation of Change In Programs of In-Service Education. In-Service Education. NSSE Yearbook LVI, Part I, 1957, p. 311, 388.

21. Hollis, E. V., "A Review of Graduate School Work," Encyclopedia of Educational Research. The MacMillan Co., N. Y., 1950, p. 1519.

22. Kelsey, L. D., and Hearne, C. C. Cooperative Extension Work. Comstock Publishing Co., Ithaca, New York, 1949, p. 424.

23. Kempfer, H., Adult Education. McGraw-Hill, New York, N. Y., 1953.

24. Lindquist, E. F., Design and Analysis of Experiments In Psychology and Education. Houghton Mifflin Co., Boston, Mass., 1953.

25. MacCoby, E. E., Newcomb, T. M., and Hartley, E. L., Readings in Social Psychology. Henry Holt, New York, N. Y., 1958.

26. McGlothlin, W. J., Patterns of Professional Education. G. P. Putnam Sons, N. Y., 1960.

27. Mendenhall, C. B., and Arisman, K. J., Secondary Education. William Sloane Associates Inc., N. Y., 1951, p. 278.

28. Miller, P. A., "Social Science in the Extension Service," Increasing Understanding of Public Problems and Policies. Farm Foundation, Chicago, Ill., 1958, p. 123.

29. Pace, C. and Eckert, R. E., They Went to College. University of Minnesota Press, Minneapolis, 1941, p. 148.

30. Powell, J. W., Learning Comes of Age. Association Press, New York, N. Y., 1956.

31. "Report of The Committee On Evaluation of Engineering Education," The Architect At Mid-Century. Reinhold Publishing Co., New York, N. Y., 1955, p. 5.

32. Seigle, S., Nonparametric Statistics For The Behavioral Sciences. McGraw-Hill, New York, N. Y., 1956, pp. 229-239, 248.

33. Shaffer, L. F., The Psychology of Adjustment. Houghton Mifflin Co., N. Y., 1936, p. 600.

34. Sheats, P. H., Jayne, C. D., and Spence, R. B., Adult Education. The Dryden Press, New York, N. Y., 1953, p. 530.

35. Solomon, J. C., A Synthesis of Human Behavior. Grune and Stratton, N. Y., 1954, p. 265.

36. Thorpe, L. P., and Schmuller, A. M., Personality, An Interdisciplinary Approach. D. Van Nostrand Co., New York, N. Y., p. 360.

37. Towle, C. The Learner In Education For The Professions. University of Chicago Press, Chicago, Ill., 1954, p. 10.

38. Tschudin, M., Belcher, H., and Nedelsky, L., Evaluation In Basic Nursing Education. C. P. Putnam's Sons, N. Y., 1958, p. 304.

39. Tyler, R. W., "The Functions of Graduate Departments and Schools of Education," Graduate Study in Education, NSSE, 50th Yearbook, Part I, 1951, p. 15.

40. Waugh, A. E., Laboratory Manual For Elements of Statistical Methods. McGraw-Hill, New York, N. Y., 1944, pp. 86-87.

41. Woodsworth, R. S., and Schlosberg, H., Experimental Psychology. Henry Holt and Co., N. Y., 1958, pp. 541-767.

Bulletins and Monographs

42. Basic Program of Liberal Education For Adults. University of Chicago Announcements, University of Chicago, 1958.

43. Bergevin, P., A Philosophy for Adult Education. Indiana and Purdue University Bulletin, 1949, p. 19.

44. Bergevin, P., and Morris, D., Group Processes for Adult Education. Indiana University - Purdue University, Bloomington, Ind., 1954, p. 86.

45. Bergevin, P., and Morris, D., A Manual For Discussion Leaders and Participants. Indiana University - Purdue University, Bloomington, Indiana, 1954, p. 73.

46. Biddle, W., Adult Development. Earlham College Bulletin, 1957, p. 25.

47. Bohlen, J. M., et. al., How Farm People Accept New Ideas. Special Report No. 15, Iowa State College Agricultural Extension Service, Ames, Iowa, 1955.

48. Brown, J. E., Communication Training Needs of Pennsylvania Extension Workers. University Park, State University Extension, 1957.

49. The Cooperative Extension Service Today: A Statement of Scope and Responsibility. U.S.D.A., Washington, D.C., 1958.

50. Edwards, M., Studies In American Graduate Education. A Report to the Carnegie Foundation, N. Y., 1944, p. 71.

51. The Effective General College Curriculum As Revealed By Examinations. University of Minnesota Press, 1937.

52. Evaluative Criteria. The Cooperative Study of Secondary School Standards, George Banta Publishing Co., Menasha, Wisconsin, 1950.

53. Freeman, L. C., et. al., Local Community Leadership. Syracuse University Bulletin, 1960, p. 29.

54. Graduate Program In Adult Education At Boston University. Boston University Bulletin, Boston, Mass., 1960.

55. Graduate Program In Adult Education. University of Michigan, 1960.

56. Havighurst, R. J., and Orr, B., Adult Education and Adult Needs. Center For Study of Liberal Education of Adults, Chicago, Ill., 1956, p. 66.

57. Hendrickson, A., Improving Adult Education In Ohio's Public Schools. Ohio State University, Columbus, Ohio, 1958, p. 4.

58. Liberal Adult Education. Fund for Adult Education, White Plains, N. Y., 78pp.

59. Lonnholm, G. B., and Schroeder, W. B., Predicting Graduate School Success. Princeton Educational Testing Service, Princeton, N. Y., 1951.

60. Miller, H. L., Understanding Group Behavior. CSLEA, Chicago, Ill., 1953, 94pp.

61. Notes and Essays On Education For Adults Nos. 4, 6, 8, 12, 15, 17, 18, 19, 21, and 32, CSLEA, Chicago, Ill.

62. Rachs, L. E., Approaches to Measurement of Values. Education Research Bulletin XIX, May 8, pp. 275-82.

63. Shinn, E. H., and Merril, F. A., Special Courses for Preparation of Agriculture and Home Economics Extension Teachers. USDA Extension Circular 55, 1927, p. 13.

64. Siegle, P. E., and Whipple, J. B., New Directions In Programming For University Adult Education. CSLEA, Chicago, Ill., 1957, 96 pp.

65. Sillars, R., Seeking Common Ground In Adult Education. Adult Education Monographs 4, A.E.A. of the U.S.A., Chicago, Ill., 1958, 99 pp.

66. Study of The Graduates of The University of Minnesota School of Nursing. By Faculty of the School of Nursing, University of Minnesota, 26 pp.

67. Wilkening, E. A., The County Extension Agent in Wisconsin: Perceptions of Role Definitions As Viewed By Agents. Research Bulletin 203, University of Wisconsin, Madison, September, 1957.

Unpublished Materials and Mimeographs

68. "Academic Training Programs In Adult Education," Mimeograph, Clearing House, CSLEA, Chicago, Ill., 1-5-60, 6 pp.

69. Aker, G. F., "The Role of the Assistant County Agent as Perceived By 4-H Adult and Junior Leaders." M. S. Thesis, University of Wisconsin, Madison, 1958.

70. Baker, H. R., "A Study of the Professional Improvement of Extension Personnel in the Province of Ontario." M. S. Thesis, University of Wisconsin, Madison, 1957.

71. Booth, Alan, "A Study of Field Work Programs for Adult Education Graduate Students in the United States." M. A. Thesis, University of California, Los Angeles, June, 1960.

72. "Challenges To Extension In A Changing Wisconsin." Mimeograph, Wisconsin Annual Cooperative Extension Conference, Madison, October 14, 1959.

73. Chamberlain, M. N., "The Professional Adult Educator: An Examination of His Competencies and of The Program of Graduate Study Which Prepares Him for Work in The Field." Ph.D. Thesis, University of Chicago, 1960.

74. Clements, W. H., "Relationships of Selected Characteristics of Graduate Students to Later Success." Ph.D. Thesis, University of Wisconsin, Madison, 1955.

75. Cook, B. D., "Comparative Analysis of Training Needs of County Agricultural Agents in Texas." Ph.D. Thesis, University of Wisconsin, Madison, 1957.

76. Duncan, D. E., "4-H Club Advisors' Concepts of Their Roles." M. S. Thesis, University of Wisconsin, Madison, 1957, 139 pp.

77. Duncan, J. A., "Training Needs of County Extension Workers", Mimeograph, University of Wisconsin, Madison.

78. "Evaluation of Professional Preparation Programs in Adult Education." Mimeograph, Joint Conference, University of Wisconsin-University of Wyoming, Madison, March 29-30, 1961.

79. "Graduate Training At The University of Chicago For The Doctorate In The Field of Adult Education." Mimeograph, University of Chicago, July, 1956, 10 pp.

80. "Graduate Study at The University of Wisconsin In The Field of Adult Education. Mimeograph, University of Wisconsin, 7-58, 11 pp.

81. Holcomb, J. M., "Education for County Extension Workers in Iowa." M. S. Thesis, Iowa State College, Ames, 1946.

82. Houle, C. O., "Educational Engineering", Paper presented at the Conference of Professors of Adult Education, Madison, Wisconsin, March 19-21, 1959. p. 1.

83. Houle, C. O., "The Emergence of Graduate Study in Adult Education." Unpublished Study, The University of Chicago, 1963.

84. Isle, W. W., "The Stanford University Follow-up Inquiry." Ph.D. Thesis, Stanford University, 1942.

85. Lorge, I., "The Adult Learner." Rex-o-graph, Columbia University, 12 pp.

86. Magee, K. E., "Undergraduate and Graduate Training of Louisiana Agricultural Extension Agents." M. S. Thesis, Louisiana State University, Baton Rouge,1957.

87. McClusky, H., "The Course of a Life Span: A Proposed Basis For A Differential Psychology of The Adult Years." Rex-o-graph, University of Michigan, 14 pp.

88. McClusky, H., "The Psychology of Adults." Mimeograph, University of Michigan, 18 pp.

89. McNaughton, D. C., "An Evaluation of the Teacher Education Program of the Stanford School of Education," Ph.D. Thesis, Stanford University College, 1942.

90. "National Seminar On Adult Education Research," Chicago, March 6-8, 1961, 8 pp.

91. Nelson, A. T., "The Selection of Doctoral Candidates." Ph.D. Thesis, Teachers College, Columbia University, N. Y., 1953.

92. Oller, G. H., "A Study of Training Programs for Beginning County Extension Agents in Nine Western States." M. S. Thesis, University of Wisconsin, Madison, 1957.

93. "Proceedings of Madison Conference of Professors of Adult Education." Madison, Wisconsin, March 18-21, 1959, pp. 169-171.

94. "Report of The Ann Arbor Conference of the Professors of Adult Education." Ann Arbor, Michigan, April 25-28, 1957, p. 77.

95. Schlutt, E. F., "The District Extension Leaders' and The Beginning County Extension Agents' Perception Of The Beginning Agents' Role Definition and Role Fulfillment." Ph.D. Thesis, University of Wisconsin, Madison, 1959.

96. Shively, B. F., "The Study and Development of Two Merit Rating Devices for Use by Supervisors to Rate Cooperative Extension Workers." M. S. Thesis, Purdue University, Lafayette, Ind., 1958.

97. Shottuck, M. B., "An Analysis of Abilities of Engineers in Industry." M. S. Thesis, University of Wisconsin, 1950.

98. Smith, M. W., "Evaluating Wisconsin's Forman Training Programs." M. A. Thesis, University of Wisconsin, Madison, 1933.

99. "Status Papers On Graduate Adult Education Programs." Commission of Professors of Adult Education, 1957.

100. "A Program For The Stimulation of The Future Development of Adult Education As A Professional Field." Adult Education Association of the U.S.A., Chicago, Ill., 26 pp.

101. Stone, J. T., "A Brief Summary of the Job Analysis Study of County Extension Workers." Agricultural Extension Mimeo, Michigan State University, East Lansing, Michigan, 18 pp.

102. Taylor, W. H., "The Role of Extension Supervisors." Ph.D. Thesis, University of Wisconsin, Madison, 1959.

103. Torrence, A. P., "A Study of the Relationship of Certain Competencies to Success in Teaching Vocational Agriculture." Ph.D. Thesis, University of Wisconsin, Madison, 1954, p. 62.

104. Tschudy, A. J., "A Study of the Experience, Education, and Professional Status of Wisconsin Agricultural Extension Personnel." M. S. Thesis, University of Wisconsin, Madison, 1956, 56 pp.

105. Verner, C., Liveright, A., Jensen, G., and Kreitlow, B. W., "Adult Education, Prospects and Program: Adult Education In Modern Society." Mimeograph, 1959, p. 1.

106. Verner, C., "A Conceptual Scheme For The Identification and Classification of Processes for Adult Education." Florida State University, Tallahassee, 1959, 54 pp.

107. Wilson, L. R., "Undergraduate and Graduate Training for County Agricultural Extension Agents." M. S. Thesis, University of Wisconsin, Madison, 1958.

Periodicals

108. Adult Education. 4:4 to 9:2, March 1954 to Winter 1961, Adult Education Association of the U.S.A., Chicago, Ill.

109. Adult Leadership. 3:4 to 9:10, October 1959 to April 1961, Adult Education Association of the U.S.A., Chicago, Ill.

110. The American Psychologist. "Recommended Graduate Training Program in Clinical Psychology," Dec. 1947, Vol. 2, No. 12, p. 539.
"The Psychologist of the Future: Scientist, Professional or Both." Nov. 1958, Vol. 13, No. 11, p. 635.
"A Survey of Graduate School Opinion Regarding Professional Training Below the Doctorate Level," Jan. 1952, Vol. 7, p. 14.

111. Barr, A. S., "The Measurement and Prediction of Teacher Efficiency: A Summary of Investigations." Journal of Experimental Education. 16:179-186, Mar., 1930.

112. Barrett, R. S., "The Process of Predicting Job Success." Personnel Psychology, 11, 39-57, 1958.

113. Berdie, R. F., Sutter, N. A., "Predicting Success of Engineering Students." Journal of Educational Psychology, 41:184-90, Mar., 1950.

114. Blanchard, B. E., Evaluation in Education." The Educational Leader. 18:6-14, October, 1954.

115. Brueckner, L. J., "Forecasting in Education." Journal of Educational Research. February, 1944, p. 474.

116. "Commission On Aims and Scope of Engineering Curricula." Journal of Engineering Education. 30:7:563-65, March, 1940.

117. Eurich, A. C., A Plan for Evaluation of Bennington College." Journal of Educational Research, 34:633-34, April, 1941.

118. Eurich, A. C., Pace, C. R., Ziegfield, E., "Evaluative Studies." Review of Educational Research, 12:5:521-33, December, 1942.

119. Extension Service Review, March 1954 to March 1961, U.S.D.A., Washington, D. C.

120. Flanagan, J. C., "Critical Requirements: A New Approach to Employee Evaluation." Personnel Psychology 2:419-25, 1949.

121. Freeman, F. S., "The Study of Individual Differences In The Education of Teachers." Journal of Educational Psychology, 41:6:366-72, October, 1950.

122. Garrett, H. G., "A Review and Interpretation of Investigations of Factors Related to Scholastic Success in Colleges of Arts and Sciences and Teachers Colleges." Journal of Experimental Education, 18:128-30, Dec., 1949.

123. Glasser, R. and Jacobs, O., "Predicting Achievement in Medical School: A Comparison of Preclinical and Clinical Criteria," Journal of Applied Psychology, 38:245-7, Aug., 1954.

124. Grossman, J., "The School Nurse's Perception of Problems and Responsibilities.' Nursing Research, 4:1:18-26, June, 1956.

125. Harris, C. W., "The Appraisal of a School--Problems for Study." Journal of Educational Research, 41:3:172-82, Nov., 1957.

126. Houle, C., "The Doctorate In Adult Education." Adult Education, Spring 1961, 62, and 63.

127. Inlow, Gail M., "Evaluating Student-Teaching Experiences." Journal of Educational Research, May, 1952.

128. Inlow, G. M., "Graduates Evaluate A Liberal Arts Program." Phi Delta Kappan, 32:8:351, April 1951.

129. Jarnecke, W. H., "Evaluating Teaching Success Through the Use of the Teaching Judgment Test." Journal of Educational Research, March, 1952, p. 691.

130. Kidd, J. W., 'Implementing the Goals of General Education." Journal of Educational Research, March, 1951, p. 521.

131. Kirby, E. L., "Training Needs of Today's County Agent." Extension Service Review, 29:10:209, October, 1959.

132. Klausmeier, H., and Swanson, D., "The Development of a Functional Course in Educational Psychology for Teachers." Journal of Educational Psychology, 41:8:449-472, December, 1950.

133. Knowles, M. S., "An Overview of the History of the Field." Adult Education, 11:4:230, Summer 1957.

134. Marsh, C. J., "The Importance of Course Objectives in Psychology as Judged by Students." Journal of Genetic Psychology, 66:139-42, March 4-5.

135. Miller, F. W., "Evaluating A Counseling Procedure." Journal of Educational Research, September, 1952, p. 61, 63, 69.

136. Mosel, J. N., "Evaluating The Supervisor Training Program." Engineering and Industrial Psychology, 1:1:19, Spring, 1959.

137. Nahm, H., "An Evaluation of Selected Schools of Nursing With Respect To Certain Educational Objectives." Nursing Research, 1:1:6-7, June 1952.

138. North, R. D., "Tests for the Accounting Profession." Educational and Psychological Measurement, Vol. 18:4:691-711, 1958.

139. "Objectives of Undergraduate Medical Education." Journal of Medical Education, 28:3:57, March, 1953.

140. Oliver, W. A., "Teacher's Education Beliefs Versus Their Classroom Practices." Journal of Educational Research, September, 1953, p. 47.

141. Orleans, J. S., Clark, L. O., and Standlee, L., "Some Preliminary Thoughts On The Criteria of Teacher Effectiveness." Journal of Educational Research, May, 1952, pp. 642-643.

142. Phi Delta Kappan. Vol. XXXX to Vol. XLII:7, Phi Delta Kappa, Inc., Spencer, Indiana.

143. Ringler, W. E., "Role of Extension Specialists and Their Status in Relation to Research and Teaching Personnel in Agronomy and Soils Department of the North Central Region." Review of Extension Research, USDA Extension Circular 521, July, 1959, p. 4.

144. Rogers, F. E., "Training Extension Workers for the Future." Extension Service Review, 29:9:187-89, September, 1958.

145. Ryans, D. G., "The Investigation of Teacher Characteristics." The Educational Record, 34:4:371-96, October, 1953.

146. Scates, D. E., 'Some Problems Connected With Evaluation." Journal of Educational Research, April, 1952, pp. 590-607.

147. Schueler, H., "The Method of Adult Education." Adult Leadership, 5:10:306-10, April, 1957.

148. Searhouse, H. G., Jr., "The University of Illinois Library School Placement Examination." Journal of Educational Research, 1951, pp. 481-489.

149. Spector, A. J., "Human Relations Behavior on the Job: The Officer Behavior Description." Journal of Applied Psychology, 41:2:110-13, 1957.

150. Stevenson, Grace T., "The Executive Committee." Adult Leadership, 8:9, 284, March, 1960.

151. Trovan, J. R., "Appraising A Counseling Program at the College Level." Occupations, 23:459-60, May, 1945.

152. Weber, Janet, Brink, W. G., and Gilland, A. R., "Success in the Graduate School." Journal of Higher Education, 32:19-24, January, 1942.

153. Whipple, J. B., "University Training for Adult Educators." Adult Education, 8:2:93-97, 1958.